CLAIMS

What is claimed is:

1   1.   A method for monitoring voice application calls over a network, comprising:

2   (a)   identifying a first leg of a voice application call;

3   (b)   creating a unique key based on the first leg of the voice application call utilizing

4   a first session object;

5   (c)   identifying a second leg of the voice application call;

6   (d)   creating another unique key based on the second leg of the voice application call

7   utilizing a second session object; and

8   (e)   associating both the first and second session objects with a single application

9   object.

1   2.   The method as recited in claim 1, wherein each leg of the voice application call

2   takes place between an end point and a call manager.

1   3.   The method as recited in claim 2, wherein each unique key associated with the

2   session objects is created utilizing port numbers associated with the end point

3   and the call manager.

1   4.   The method as recited in claim 2, wherein each leg of the voice application calls

2   is identified upon receipt of a message.

1   5.   The method as recited in claim 4, wherein the message includes a station call

2   information message.

1   6.   The method as recited in claim 4, wherein the message includes a plurality of
2   fields.

1   7.   The method as recited in claim 6, and further comprising creating another unique
2   key associated with the application object.

1   8.   The method as recited in claim 7, wherein the unique key associated with the
2   application object is created based on the fields.

1   9.   The method as recited in claim 6, wherein the message includes a calling party
2   name field, a calling party port number field, a called party name field, and a
3   called party port number field.

1   10.   The method as recited in claim 1, and further comprising identifying the
2   completion of the voice application call.

1   11.   The method as recited in claim 10, wherein the completion of the voice
2   application call is identified upon receipt of a completion message.

1   12.   The method as recited in claim 11, wherein the completion message is selected
2   from the group consisting of a station on hook message and a station stop media
3   transmission message.

1   13.   A computer program product for monitoring voice application calls over a
2   network, comprising:
3   (a)   computer code for identifying a first leg of a voice application call;
4   (b)   computer code for creating a unique key based on the first leg of the voice
5   application call utilizing a first session object;
6   (c)   computer code for identifying a second leg of the voice application call;

7   (d)   computer code for creating another unique key based on the second leg of the

8   voice application call utilizing a second session object; and

9   (e)   computer code for associating both the first and second session objects with a

10   single application object.

1   14.   The computer program product as recited in claim 13, wherein each leg of the

2   voice application call takes place between an end point and a call manager.

1   15.   The computer program product as recited in claim 14, wherein each unique key

2   associated with the session objects is created utilizing port numbers.

1   16.   The computer program product as recited in claim 14, wherein each unique key

2   associated with the session objects is created utilizing port numbers associated

3   with the end point and the call manager.

1   17.   The computer program product as recited in claim 14, wherein each leg of the

2   voice application calls is identified upon receipt of a message.

1   18.   The computer program product as recited in claim 17, wherein the message

2   includes a station call information message.

1   19.   The computer program product as recited in claim 17, wherein the message

2   includes a plurality of fields.

1   20.   The computer program product as recited in claim 19, and further comprising

2   computer code for creating another unique key associated with the application

3   object.

1 21.   The computer program product as recited in claim 20, wherein the unique key
2   associated with the application object is created based on the fields.

1 22.   The computer program product as recited in claim 19, wherein the message
2   includes a calling party name field, a calling party port number field, a called
3   party name field, and a called party port number field.

1 23.   The computer program product as recited in claim 13, and further comprising
2   computer code for identifying the completion of the voice application call.

1 24.   The computer program product as recited in claim 23, wherein the completion of
2   the voice application call is identified upon receipt of a completion message.

1 25.   The computer program product as recited in claim 24, wherein the completion
2   message is selected from the group consisting of a station on hook message and
3   a station stop media transmission message.

1 26.   The computer program product as recited in claim 23, and further comprising
2   computer code for incrementing an index variable upon the receipt of the
3   completion message.

1 27.   A system for monitoring voice application calls over a network, comprising:
2 (a)   logic for identifying a first leg of a voice application call;
3 (b)   logic for creating a unique key based on the first leg of the voice application call
4   utilizing a first session object;
5 (c)   logic for identifying a second leg of the voice application call;
6 (d)   logic for creating another unique key based on the second leg of the voice
7   application call utilizing a second session object; and

8 (e) logic for associating both the first and second session objects with a single

9 application object.

1 28. A system for monitoring voice application calls over a network, comprising:

2 (a) means for identifying a first leg of a voice application call;

3 (b) means for creating a unique key based on the first leg of the voice application

4 call utilizing a first session object;

5 (c) means for identifying a second leg of the voice application call;

6 (d) means for creating another unique key based on the second leg of the voice

7 application call utilizing a second session object; and

8 (e) means for associating both the first and second session objects with a single

9 application object.

1 29. A method for monitoring voice application calls over a network, comprising:

2 (a) identifying a plurality of legs of a voice application call each with a session

3 object associated therewith;

4 (b) creating a single application object; and

5 (c) handling the session objects associated with the legs of the voice application call

6 with the single application object.

1 30. A data structure stored in memory for monitoring voice application calls over a

2 network, comprising an application object adapted for handling two legs of a

3 voice application call.

1 31. A method for monitoring voice application calls over a network, comprising:

2 (a) receiving a first message including a plurality of fields;

3   (b)   identifying a first leg of a voice application call between a first end point and a

4   call manager involving a first Internet Protocol (IP) telephone utilizing a skinny

5   client control protocol (SCCP), in response to the first message;

6   (c)   creating a unique key based on the first leg of the voice application call utilizing

7   a first session object, wherein the unique key is created based on port numbers of

8   the first end point and the call manager;

9   (d)   receiving a second message including a plurality of fields;

10   (e)   identifying a second leg of the voice application call between a second end point

11   and the call manager involving a second Internet Protocol (IP) telephone

12   utilizing SCCP, in response to the second message;

13   (f)   creating another unique key based on the second leg of the voice application call

14   utilizing a second session object, wherein the another unique key is created

15   based on port numbers of the second end point and the call manager;

16   (g)   associating both the first and second session objects with a single application

17   object;

18   (h)   creating another unique key based on the fields of the first message and the

19   fields of the second message for identifying the single application object;

20   (i)   identifying the completion of the voice application call upon the receipt of a

21   completion message; and

22   (j)   incrementing an index variable upon the receipt of the completion message.

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